IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No.:

10/054,604

Confirmation No.: 7107

Appellant:

Unno

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TC/AU:

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Examiner:

Opsasnick

Docket:

TI-29771

Cust. No.:

23494

APPELLANT'S BRIEF (substitute)

Commissioner for Patents P.O.Box 1450 Alexandría VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief mailed 07/11/2007, appellant hereby submits the attached sheets which contain the Rule 41.37 items of appellant's substitute Appeal Brief. The fee for filing a brief in support of the appeal has previously been paid. The Director is hereby authorized to charge any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted.

/Carlton H. Hoel/

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Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Pursuant to MPEP 1205.02, for each claim in the case appellant states the status as follows:

Claim 1: allowed

Claim 2: allowed

Claim 3: rejected

Claim 4: rejected

Claim 5: rejected

Pursuant to MPEP 1205.02, appellant identifies each claim on appeal as follows

Claim 3: on appeal

Claim 4: on appeal

Claim 5: on appeal

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The independent claims on appeal consist of device claim 3, method claim 4, and method claim 5.

The subject matter of claim 3 is layered encoder (application page 5, lines 4-6 and lines 8-9; FIG.1), comprising:

(a) an estimator for each layer of a layered encoder (application page 5, lines 8-9; page 5, line 26 to page 6, line 9; FIG.1, "LPC synthesis filter", "fixed codebook", "error minimization"); and

(b) perceptual filters including inverse filters for each layer (application page 6, lines 5-6, lines; FIG.1, "PWF0", "PWF0⁻¹", "PWF1", ...), wherein at least one of said layer perceptual filters is weaker than another of said layer perceptual filters (application page 6, lines 18-21).

The subject matter of claim 4 is a method of decoding a layered encoded signal (application page 5, lines 6-7), comprising:

(a) applying a short-term postfiltering to a synthesized layered encoded signal (application page 11, lines 13-15) wherein the short-term postfiltering differs for at least two of the number of layers decoded to form said synthesized layered encoded signal (application page 11, lines 15-30).

The subject matter of claim 5 is a method of decoding a layered encoded signal (application page 5, lines 7-8), comprising:

(a) applying a long-term postfiltering to a synthesized layered encoded signal (application page 12, lines 3-6) wherein the long-term postfiltering is independent of the number of layers decoded to form said synthesized layered encoded signal (application page 12, lines 19-21).

Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal

The grounds of rejection to be reviewed on appeal are:

(1) Claims 3-5 were rejected as unpatentable over application Figs.2a-2b plus related text in view of the Gao reference.

Rule 41.37(c)(1)(vii) Arguments

(1) Claims 3-5 were rejected as unpatentable over application Figs.2a-2b plus related text in view of Gao.

Claim 3, the Examiner cited Gao generally for varying filtering with varying coding types plus column 54, lines 1-4 for weaker filters as making obvious the different perceptual filter strength for different encoding layers in claim 3.

Appellant replies that Gao has an explicit perceptual filter discussion in section 3.6 (column 34, line 65 to column 35, line 33), and there is no suggestion of differing filter strength among the different coders of Gao. Furthermore, Gao switches among separate coders for different bitrates (see Fig.1), so there is no suggestion of applying Gao to a layered coder because the approaches of Gao and layered coding conflict. Lastly, Gao column 54, lines 1-4 relates to a spectral filter for the excitation, not a perceptual filtering.

<u>Claim 4</u>, the Examiner relied upon the analysis of Gao in the claim 3 argument plus column 53, line 60 to column 54, line 5 for weaker filters.

Appellant repeats the foregoing argument that the switching among coders of Gao conflicts with layered coding of Figs.2a-2b and that Gao column 53, line 60 to column 54, line 5 relates to the excitation encoding, not the decoding of claim 4. So there is no suggestion of claim 4.

<u>Claim 5</u>, the Examiner relied upon the analysis of Gao in the claim 3 argument plus column 59, lines 23-36 for postfiltering.

Appellant repeats the foregoing argument that the switching among coders of Gao conflicts with layered coding of Figs.2a-2b. So there is no suggestion of claim 5.

Consequently, the application Figs.2a-2b layered coding plus Gao do not suggest any of claims 3-5, and the claims are patentable over the references.

Rule 41.37(c)(1)(viii) Claims appendix

- 3. A layered encoder, comprising:
 - (a) an estimator for each layer of a layered encoder; and
- (b) perceptual filters including inverse filters for each layer, wherein at least one of said layer perceptual filters is weaker than another of said layer perceptual filters.
- 4. A method of decoding a layered encoded signal, comprising:
- (a) applying a short-term postfiltering to a synthesized layered encoded signal wherein the short-term postfiltering differs for at least two of the number of layers decoded to form said synthesized layered encoded signal.
- 5. A method of decoding a layered encoded signal, comprising:
- (a) applying a long-term postfiltering to a synthesized layered encoded signal wherein the long-term postfiltering is independent of the number of layers decoded to form said synthesized layered encoded signal.

Rule 41.37(c)(1)(ix) Evidence appendix

none

Rule 41.37(c)(1)(x) Related proceedings appendix

none